WO 2005/021316 PCT/JP2004/011804

CLAIMS

22

1. A control apparatus for a vehicle which comprises a fuel cell for generating electricity, auxiliary equipment of the fuel cell, a secondary battery to be charged with electricity generated by the fuel cell, and a motor to be fed with electricity from the fuel cell and/or the secondary battery, wherein

the control apparatus

5

10

15

commences start-up of the fuel cell, supplying electricity from the secondary battery to the auxiliary equipment,

monitors status of the fuel cell, and as the status meets a predetermined condition,

computes an electric power at which the secondary battery discharges electricity, based on state of charge of the secondary battery and remaining time to completion of the start-up of the fuel cell, and

supplies electricity from the secondary battery to the motor at the computed electric power.

- 2. The control apparatus according to claim 1, wherein
 the predetermined condition is based on the state of charge of the secondary battery.
 - 3. The control apparatus according to claim 1, wherein the electric power is computed in the case the motor is fed with electricity from the secondary battery.
- 25 4. The control apparatus according to claim 1, wherein the electricity from the secondary battery is supplied to power-consuming auxiliary equipment before the motor.
- 5. The control apparatus according to claim 1, wherein the start-up of the fuel cell can be executed in a 30 plurality of procedures, one of the procedures is selected

WO 2005/021316 PCT/JP2004/011804

23

depending on ambient conditions of the vehicle, and the predetermined condition is set for each procedure.

- 6. The control apparatus according to claim 5, wherein the remaining time to completion of the start-up of the fuel cell is set for each procedure.
- 7. The control apparatus according to claim 5, wherein the ambient conditions comprise ambient temperature of the vehicle.
- 8. A method for starting up a vehicle which comprises a fuel cell for generating electricity, auxiliary equipment of the fuel cell, a secondary battery to be charged with electricity generated by the fuel cell, a motor to be fed with electricity from the fuel cell and/or the secondary battery, the method comprising:
- commencing start-up of the fuel cell, supplying electricity from the secondary battery to the auxiliary equipment;

monitoring status of the fuel cell;

computing an electric power at which the secondary battery discharges electricity, based on state of charge of the secondary battery and remaining time to completion of the start-up of the fuel cell, as the status meets a predetermined condition; and

supplying electricity from the secondary battery to the motor at the computed electric power.